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Federal Communications Commission

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
 Rulemaking To Amend Part 1)
 and Part 21 of the Commission's)
 Rules to Redesignate the 27.5-)
 29.5 GHz Frequency Band and to)
 Establish Rules and Policies for)
 Local Multipoint Distribution Service)

CC Docket No. 92-297

To: The Commission

COMMENTS OF
MULTI-MICRO, INC.

Multi-Micro, Inc. ("Multi-Micro") hereby submits its comments in response to the Notice of Proposed Rulemaking in the captioned proceeding, released January 8, 1993. Multi-Micro is a licensee of MMDS facilities in a number of markets nationwide and has been an active participant in the development of the wireless cable industry since its inception. Having monitored developments in the LMDS arena very carefully over the last two years, Multi-Micro believes this new industry holds tremendous promise. With the recommendations offered below, we endorse the Commission's adoption of the proposed LMDS rules.

I. Technical Issues

In the NPRM, the FCC recognized the virtue of a flexible structure for technical standards for deployment of 28 GHz systems, in light of the variety of distinct services which are envisaged for operation in this spectrum. NPRM at Para. 23-24. Multi-Micro endorses the Commission's view that "only limited technical regulations may be needed to insure adequate

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244

interference control and coordination of services at the interfaces of the designated service areas." *Id.*

However, the text of the proposed rule on this point, Section 21.1012-Spectrum Utilization, does not reflect the technical flexibility recommended in the NPRM itself. Proposed Section 21.1012 would require that applications "contain detailed descriptions of the cellular configuration..., the modulation method," and other technical parameters. Multi-Micro believes it is far too early in the development of the LMDS service, given significant strides expected in the next twelve to twenty-four months, to require that a 28 GHz licensee's polarization and modulation schemes be cast in stone in its application. Multi-Micro anticipates the advent of digital capability in very short order so that an applicant's commitment to a modulation scheme at this juncture would be ill advised. Moreover, once the digital mode is available, the 20 MHz spacing contemplated by the proposed rules would be unnecessary. Thus, the rules should require a *minimum* of 49 broadcast channels with a *maximum* bandwidth of 20 MHz per channel.

In order to give the LMDS industry the opportunity to evolve in harmony with very rapid developments in digital technology, Multi-Micro urges that the Commission leave to individual operators the decision how to divide the 1000 MHz of spectrum available for their use in a given market. Likewise, it should be a function of an individual applicant's utilization plan precisely what specific frequency stability characteristics the

applicant will utilize.

Interference between adjacent service areas should not be a problem given the strong signal capture effect which either FM or digital signals exhibit. A 20 dB differential in signal levels will be sufficient to eliminate harmful levels of electrical interference to adjacent service areas. Thus, adjacent area interference control should be based upon a 20 dB desired-undesired signal ratio. This margin should be achievable consistently as long as licensees ensure that their customers' receive antennas are directionalized and properly adjusted.

Finally, because 28 GHz systems will be built at different rates from one service area to another, licensees should be required to demonstrate a minimum of 20 dB desired-undesired signal ratio to theoretical receive sites in adjacent area systems prior to construction of any cell with five miles of the borders of such service areas. This requirement will ensure that no prohibitive interference is caused to operational adjacent area systems.

II. Service Areas

Multi-Micro has serious reservations about the wisdom of the Basic Trading Area format proposed in the NPRM. In any number of major metropolitan areas -- San Francisco and Los Angeles, to mention only two -- the BTA envelopes an enormous population, larger even than the Consolidated Metropolitan Statistical Areas in which those markets are located. For example, the Los Angeles BTA encompasses approximately 14.8 million people and extends all

three years and 50 percent coverage within five years. Second, given the expansiveness of many BTAs, the Commission should provide that regions unserved by an LMDS operator after five years be opened for additional applications.

Although the BTA concept could be workable if modified in these ways, the preferable course in Multi-Micro's view is to model LMDS service areas roughly on the approach utilized in the cellular service. However, in order to eliminate the complexity of licensee-defined service areas, we recommend that service areas be delimited in the familiar terms of MSAs, PMSAs and RSAs. This would satisfy the Commission's concern that all land area within the United States be encompassed. NPRM at Para. 30. In virtually all cases, MSAs and PMSAs are more manageable from an operations vantage than are BTAs, and, at the same time, represent clusters of commercial activity denoted by BTAs.

III. Application Requirements

In the NPRM the Commission proposes a "letter perfect" standard for acceptance of LMDS applications, or, alternatively, the "post-card" method akin to the approach now utilized in IVDS application processing. Multi-Micro urges the Commission to adopt the "letter perfect" standard. This would eliminate the considerable administrative burden existing under current Part 21 rules where only substantial compliance is required for acceptability. On this score, the FCC's experience with the "letter perfect" approach in, for example, the FM radio service, has confirmed its virtue for processing purposes. By contrast,

Multi-Micro believes that the "post-card" format has the potential for significant abuse by application mills, given the FCC's concomitant proposal to permit tentative selectees up to thirty days to submit a complete proposal once their applications are selected for processing.

In this connection, the one-calendar-day filing opportunity proposed in the NPRM may or may not be appropriate depending upon the application requirements the Commission ultimately adopts. For example, if a thirty day public notice were issued announcing the opening of an LMDS filing window in twenty-five markets, such a schedule might fairly be accommodated if the "post-card" method were in place, but would be burdensome if full-blown, "letter perfect" applications were required to be filed on the date the window opened. On balance, Multi-Micro believes that the benefit to be gained by requiring "letter-perfect" applications to be submitted at the threshold -- discouraging, at least to some extent, the pervasive speculation that the "post-card" method would breed -- outweighs the efficiency in processing which is the "post-card" method's only virtue. While administrative efficiency is an important objective, it is more important that LMDS tentative selectees be entities which are not speculating but genuinely intend to construct and develop their markets. The "post-card" method, a fortiori, has the potential for jeopardizing that superior objective.

IV. Demonstration of Financial qualifications

Multi-Micro endorses the "firm financial commitment" approach proposed in the NPRM. Along with other measures outlined in the NPRM, this will be an additional protection against the abuses available when an applicant is required only to certify reasonable assurance of financing. It is commonly recognized that bank letters purportedly conveying "reasonable assurance", as a practical matter, give the Commission little confidence that the subject funds are genuinely available. For this reason, it is not surprising that other services administered by the FCC have also abandoned the reasonable assurance concept in favor of the more reliable firm financial commitment requirement.

We note an error, however, in the phrasing of the proposed rule itself (Section 21. 1011). Subparagraph (c) of the rule states that applicants relying upon non-institutional funding

proposed Section 21.1010, governing interests in LMDS applications. Read literally, the rule would prohibit an entity from holding an interest in LMDS applications in *different* markets. We are aware of no public interest-related concern which the rule in that form might have been intended to address. Indeed, that rendering of the rule is directly at odds with the FCC's discussion at Paragraph 45 of the NPRM. Accordingly, the rule should be clarified to specify that one entity may not hold an interest in more than one applicant "in the same market."

V. Cross-Ownership

Multi-Micro opposes ownership by cable companies in LMDS licensees serving the same market. It is beyond cavil that a principal purpose for the Commission's creation of the LMDS service is to promote competition in the video entertainment marketplace. Although LMDS will have various applications, the principal use of the 28 GHz spectrum in the near term will be video distribution. For this reason, it would be unwise for the Commission to allow cable companies to have an interest in local LMDS facilities. The regulatory oversight required to prevent anti-competitive abuses would not be outweighed by the theoretical prospect that the cable company as an LMDS licensee might implement non-video entertainment, alternative technologies

interests in LMDS licensees, the cross-ownership rule should be restricted to cases where the cable company is not the dominant deliverer of video programming in the market in question.

VI. Miscellaneous Recommendations

License Terms. It is our view that the five year license term proposed in the NPRM is too short. Considering the significant capital investment which will be required to build and launch a new LMDS system, we are concerned that lenders will be reluctant to provide financing at adequate levels without an assurance that the initial license term is long enough to enable a new LMDS venture to become a going concern. A license term of ten years, identical to the term accorded other Part 21 licensees, would be more appropriate.

Auctions. Although the Commission has expressed interest in the prospect of obtaining auction authority to implement the LMDS service, we believe auctions would be a mistake. More than any technology to come along in years, LMDS holds the potential for varied and distinct applications which will be, in the end, a function principally of the ingenuity of LMDS licensees. The creative possibilities for uses of this technology are too important to deprive smaller LMDS aspirants the opportunity to bring good ideas to fruition merely because they lack the financial wherewithal to bid competitively for an LMDS license. Whatever other services may be well suited for the auction approach, LMDS is not one of them. We therefore recommend that auction authority not be sought in connection with this service.

VII. Conclusion

Multi-Micro applauds the Commission's efforts to launch the LMDS industry expeditiously. We believe that LMDS holds tremendous promise for bringing rapidly evolving technology to consumers in very short order. Modified to incorporate the changes recommended herein, the new rules will facilitate the development of this industry and should be adopted quickly.

Respectfully submitted,

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